

Patent claims

1. A method for producing a dispersible natural fertiliser from horse manure, characterized in that
the horse droppings excreted by horses are collected and processed within a certain time frame which covers preservation of the natural humidity and loose structure of the horse droppings as much as possible.
2. A method according to claim 1, characterized in that
the horse droppings are separated from other constituents present, like straw, urine straw, other litter or foreign matter.
3. A method according to claim 1 or 2, characterized in that
the particular structure of the horse droppings is destroyed and the horse droppings are crushed roughly.
4. A method according to any one of claims 1 to 3, characterized in that
the horse droppings are crushed mechanically.
5. A method according to any one of claims 1 to 4, characterized in that
the horse droppings are spread prior to the mechanical crushing.
6. A method according to any one of claims 1 to 5, characterized in that
the spread horse droppings are crushed mechanically by means of a blower vacuum shredder.

7. A method according to any one of claims 1 to 3,
characterized in that
the horse droppings are crushed by animals.
8. A method according to any one of claims 1 to 3 and 5,
characterized in that
the horse droppings are crushed by domestic chickens.
9. A method according to any one of claims 1 to 3, 5 or 6,
characterized in that
the chickens used are kept in a ventilated, closed room and in a deep-litter system.
10. A method according to any one of claims 1 to 9,
characterized in that
the crushed horse droppings are dried.
11. A method according to any one of claims 1 to 10,
characterized in that
the crushed horse droppings are air dried or dried in the sun with aeration.
12. A method according to any one of claims 1 to 11,
characterized in that
the air drying takes place on flat, roofed surfaces or on grating pervious to air.
13. A method according to any one of claims 1 to 12,
characterized in that
the initial drying is continued until humidity has dropped by approx. 50%.

14. A method according to any one of claims 1 to 13,
characterized in that
the initially dried and roughly crushed horse droppings are finally dried to a residual humidity of approx. 5% for the production of chaff.
15. A method according to any one of claims 1 to 14,
characterized in that
a granular material is produced from the initially dried and crushed horse droppings.
16. A method according to any one of claims 1 to 15,
characterized in that
the granular material is produced in an extruder.
17. A method according to claim 16,
characterized in that
the horse droppings are not crushed prior to the extrusion.
18. A method according to any one of claims 1 to 17,
characterized in that
the residual humidity is adjusted to approx. 5% in the final drying after granulation.
19. A method according to any one of claims 1 to 18,
characterized in that
the horse droppings are processed within one week from the time of their excretion.
20. A method according to any one of claims 1 to 18,
characterized in that
the horse droppings are processed within six months, excluding weather impacts like temperature, humidity and sun irradiation.

21. A method according to any one of claims 1 to 20,
characterized in that
micro-organisms, such as lactic acid bacteria, photo synthesis bacteria, yeasts, actinomycetes
and noble mould are added.
22. A natural fertiliser,
produced by
collecting horse droppings and processing these within a certain time frame which covers
preservation of the natural humidity and loose structure of the horse droppings as much as
possible.
23. A natural fertiliser according to claim 22,
produced by
separation of other constituents present, like straw, urine straw, other litter or foreign matter
from the horse droppings.
24. A natural fertiliser according to claim 22 or 23,
produced by
destroying the particular structure of the horse droppings and crushing them roughly.
25. A natural fertiliser according to any one of claims 22 to 24,
produced by
mechanical crushing of the horse droppings.
26. A natural fertiliser according to any one of claims 22 to 25,
produced by
spreading the horse droppings prior to crushing them mechanically.

27. A natural fertiliser according to any one of claims 22 to 26,
produced by
crushing the spread horse droppings mechanically by means of a blower vacuum shredder.
28. A natural fertiliser according to any one of claims 22 to 24,
produced by
the use of animals to crush the horse droppings.
29. A natural fertiliser according to any one of claims 22 to 24 and 26,
produced by
the use of domestic chickens to crush the horse droppings.
30. A natural fertiliser according to any one of claims 22 to 24, 26 or 27,
produced by
the use of chickens kept in an airy, closed deep-litter room.
31. A natural fertiliser according to any one of claims 22 to 30,
produced by
drying the crushed horse droppings.
32. A natural fertiliser according to any one of claims 22 to 31,
produced by
drying the crushed horse droppings by air drying or ventilated sun drying.
33. A natural fertiliser according to any one of claims 22 to 32,
produced by
air drying on flat, roofed areas or on grating pervious to air.
34. A natural fertiliser according to any one of claims 22 to 33,
produced by
initial drying to a reduction in humidity of approx. 50%.

35. A natural fertiliser according to any one of claims 22 to 34,
produced by
final drying of the initially dried and roughly crushed horse droppings to a residual humidity of approx. 5% for the production of chaff.
36. A natural fertiliser according to any one of claims 22 to 35,
produced by
granular material production from the partially dried and crushed horse droppings.
37. A natural fertiliser according to any one of claims 22 to 36,
produced by
making a granular material in an extruder.
38. A natural fertiliser according to claim 37,
produced by
extruding the horse droppings without prior crushing.
39. A natural fertiliser according to any one of claims 22 to 38,
produced by
final drying of the granulated material to an adjusted residual humidity of approx. 5%.
40. A natural fertiliser according to any one of claims 22 to 39,
produced by
processing of the horse droppings within one week from the time of their excretion.
41. A natural fertiliser according to any one of claims 22 to 39,
produced by
processing the horse droppings within six months under the exclusion of the impacts of weather, like temperature, humidity and sun irradiation.

42. A natural fertiliser according to any one of claims 22 to 41,
produced by
adding micro-organisms, like lactic acid bacteria, photo synthesis bacteria, yeasts, actiomy-
cetes and noble mould.
43. A natural fertiliser consisting of formed and dried horse droppings material.
44. A natural fertiliser according to claim 43,
characterized in that
micro-organisms like lactic acid bacteria, photo synthesis bacteria, yeasts, actiomyces and
noble mould are contained.
45. A natural fertiliser according to claim 43 or 44,
characterized in that
the horse droppings material is granulated.
46. A natural fertiliser according to any one of claims 43 to 45,
characterized in that
the horse droppings material is adequately chopped to form chaff.
47. A natural fertiliser according to any one of claims 43 to 46,
characterized in that
it contains less than 5% residual humidity.